

REMARKS

The Office Action mailed on May 20, 2004, has been reviewed and the comments of the Patent and Trademark Office have been considered. Prior to this paper, claims 20-40 were pending in the present application. By this paper, Applicants cancel claim 40 without prejudice or disclaimer. Therefore, claims 20-39 are now pending in the present application.

Applicants respectfully submit that the present application is in condition for allowance for the reasons that follow.

Claim Objections

Claims 27 and 28 are objected to as containing informalities. Applicants have amended these claims as seen above. Reconsideration is respectfully requested.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claim 40 stands rejected under 35 U.S.C. §112, first paragraph. Applicants hereby cancel claim 40 without prejudice or disclaimer, rendering the rejection moot.

Claim Rejections Under 35 U.S.C. §103(a)

In the Office Action, Claims 20-21, 23, 25-26, and 37-39 are rejected under 35 U.S.C. §103(a) as being unpatentable over Minamid (U.S. Patent No. 5,575,866) in view of Creps (U.S. Patent No. 4,358,887), while claims 22, 24, 27-28, 34 and 36 are rejected in view of these references when further combined with Kotera (U.S. Patent No. 4,340,519). Claims 25-26, 29-30 and 39 stand rejected under the same statute based on the combination of Takazawa (U.S. Patent No. 4,774,10) when combined with Hiromori (U.S. Patent No. 4,791,025), while claims 20-39 are rejected under the same statute based on the combination of Strohmeier

(U.S. Patent No. 3,630,057) with Takazawa, Creps, and Kotera. Applicants respectfully traverse the rejection as to the claims above, and submit that these claims are allowable for at least the following reasons.

Applicants rely on MPEP § 2143, which states that:

[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

It is respectfully submitted that at least the first and third criteria of MPEP § 2143 have not been met in the Office Action.

The Cited References Do Not Suggest All Claim Recitations

Even if the first requirement of MPEP § 2143 was satisfied in the Office Action (which it is not, as explained below), the cited references still do not meet the third requirement, which is that “the prior art reference (or references when combined) must teach or suggest all the claim limitations.”

Minamid & Creps - Claim 20: Claim 20 recites a method of manufacturing a coated steel wire having a bright looking intermediate surface, including the step of coating the intermediate layer with transparent polyester, “wherein said polyester is **immediately** disposed on said intermediate coating layer.” (Emphasis added.) That is, the transparent polyester is disposed right on the bright looking intermediate layer – there is not a layer in between the bright layer and the polyester. Thus, in order for claim 20 to be found unpatentable, among other requirements, a reference that teaches or suggests that polyester is immediately disposed on a bright looking intermediate surface must be found.

The Office Action relies on Creps to teach a polyester polymer. True, Creps does teach the deposition of polyester on a wire having an intermediate layer. Assuming *arguendo*

that this intermediate layer is bright looking, the polyester of Creps is not “immediately disposed on said intermediate coating layer,” because a chromate compound is disposed between the alleged bright looking layer and the polyester. As is stated in the Office Action, the chromate is not provided “to obtain a bright surface, rather, chromate is deposited on the [alleged] shiny coating to retain its [alleged] brightness.” That is, Creps teaches that a chromate coating is deposited between the intermediate galvanized coating and the plastic coating (see col. 3, lines 29-32). Further, by allegedly teaching the importance of placing a chromate layer between the galvanized coating and the polyester coating, Creps in fact teaches away from a manufacturing method where polyester is immediately disposed on an intermediate coating layer having a bright looking surface.

Minamid also does not teach this step, nor does he suggest this step, since his wires are intended to be subjected to a vulcanizing environment during the fabrication of tires. (See, e.g., Minamid, col. 10, lines 18-20.) Therefore, even if Creps and Minamid are combined, the polyester layer would not be immediately disposed on any alleged bright looking surface.

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Claim 20 also recites a method of manufacturing a coated steel wire having a bright looking intermediate surface, including the step of “giving a degree of brightness to said intermediate coating by drawing said coated steel core.” (Emphasis added.) That is, the degree of brightness is obtained by drawing a coated steel core. Thus, in order for claim 20 to be found unpatentable, among other requirements, a reference that teaches or suggests obtaining a degree of brightness by drawing a coated steel core must be presented.

Neither Minamid nor Creps is such a reference. Minamid does teach plating a drawn and patented steel rod and wet-drawing the plated steel rod into a fine steel wire. Minamid does not, however, teach that his method results in a bright looking surface. Indeed, the Office Action does not assert that Minamid specifically teaches a bright looking surface as a result of the wet-draw. Minamid also does not suggest a bright looking surface, and, in fact, teaches away from such a surface by teaching, immediately after disclosing the wet-drawing

process, that his wires are used as reinforcing material for tires, belts and cords. One of ordinary skill in the art would simply not consider a reference that teaches the fabrication of a wire to be imbedded in a car tire for a teaching of a wire with a bright looking surface.

The Office Action states that “the resultant wire of Minamida necessarily has a bright surface and . . . said brightness is due to the peripheral roughness of the intermediate coating layer.” It appears that the Office Action relies on common knowledge in the art, as is discussed and permitted in MPEP § 2144.03, to satisfy the first requirement of MPEP § 2143. However, Applicants note that § 2144.03 allows an applicant “to traverse such an assertion,” and that when an applicant does so, “the examiner should cite a reference in support of his or her position.” (MPEP § 2144.03, second paragraph.) Applicants hereby traverse the assertion that “the resultant wire of Minamida necessarily has a bright surface.” **Applicants thus request, relying on § 2144.03, that the PTO cite a reference and exactly identify where such a reference shows that Minamida teaching’s necessarily result in a wire with a bright looking surface, else allow the claims.**

Creps does not teach drawing a wire, as was agreed during the interview of November 25, 2003. Creps therefore cannot teach that brightness is imparted onto a coated steel wire by drawing.

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In sum, at least two recitations of claim 20 are not found in the proffered combination, and thus claim 20 and the claims that depend from claim 20 are allowable.

Minamid & Creps - Claim 25: Independent claim 25 recites a drawn wire with an intermediate layer having a bright looking surface with “a polyester coating **immediately** upon said intermediate coating.” (Emphasis added.) That is, as with claim 20, polyester is disposed right on the bright looking intermediate layer – there is not layer in between the bright layer and the polyester. Because, as detailed above, Creps fails to teach this recitation and Minamida does not remedy the deficiencies of Creps (and in fact teaches away from a polyester coating), claim 25 is not obvious in view of the proffered combination.

Further, as noted above, it has not been established that Minamid results in a bright looking surface. In regard to Creps, the PTO appears to take the position, in rejecting claims that are dependent from claim 25, that the teachings of Creps spanning col. 1, line 57 through col. 2, line 15, results in a wire with a bright looking surface. **Applicants request, again relying on § 2144.03, that the PTO cite a reference and exactly identify where such a reference demonstrates that the method of Creps results in a bright looking surface, else allow the claims.**

In sum, claim 25 and the claims that depend from claim 25 are allowable.

Minamid, Creps & Kotera - Claims 22, 24, 27-28, 34 and 36 (and presumably, claim 32): Claims 22, 24 and 27-28 ultimately depend from either of claims 20 or claims 25. As shown above, Minamid and Creps, even after combination, are deficient in at least two recitations vis-à-vis claims 20 and 25. Kotera fails to remedy these deficiencies, and nothing is alleged to the contrary in the Office Action. Therefore, since claims 20 and 25 are allowable, claims 22, 24 and 27-28 are also allowable for at least this reason.

Claims 34 and 36 ultimately depend from claim 32. Claim 32, as with claim 20, recites a method of manufacturing a coated steel wire having a bright looking intermediate surface by drawing a coated steel core with an intermediate layer to obtain a bright looking surface, and coating the intermediate layer with transparent polyester, wherein the polyester is **immediately** disposed on the intermediate coating layer. Claim 32 is therefore allowable due to the deficiencies of Minamid and Creps. As noted above, Kotera fails to remedy the deficiencies of these references. Therefore, claims 34 and 36 are allowable due at least to the fact that claim 32 is allowable.

Takazawa & Hiromori - Claim 25: Claim 25 recites a polyester coating that is transparent. Neither Takazawa nor Hiromori disclose or suggest such a feature, and the Office Action does not allege the contrary. Moreover, Hiromori teaches that the polyester polymer coating his wire is paint, which is not transparent. Thus, Hiromori teaches away from the present invention.

Also, as noted above, claim 25 recites a drawn wire with an intermediate layer having a bright looking surface. Neither Takazawa nor Hiromori specifically disclose or suggest a bright looking surface, and the Office Action does not assert anything to the contrary. The Office Action instead alleges that as “to the presence of a bright looking surface, applicants have admitted on the record that the bright looking surface is resultant from drawing.”

Applicants have done no such thing. Applicants have “admitted” that the wire coated with the intermediate surface is drawn in a manner so that, as a result of the drawing process, the intermediate layer is bright looking. This does not mean that all drawing results in a bright looking intermediate layer – only that the Applicants draw the wire in a certain manner to obtain a certain result. The allegation by the PTO is analogous to an argument that because a painter says that he or she paints a house so that it is red, the painter has admitted that painting a house results in a red house. This does not comport with anything that Applicants have previously argued.

Moreover, the Office Action states that because of what “applicants have admitted,” the bright looking surface “would be inherent in the drawn wire suggested by the prior art.” Applicants respectfully rely on MPEP § 2112, which states that while “a rejection under 35 U.S.C. §102/103 can be made when the prior art product seems to be identical except that the prior art is silent to an inherent characteristic,” the “[E]xaminer *must* provide rationale or evidence tending to show inherency.” (MPEP § 2112, subsections 3 and 4, emphasis added.) Applicants further provide the following excerpt from MPEP § 2112:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijkaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present’ in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not

sufficient.” In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted) (The claims were drawn to a disposable diaper having three fastening elements. The reference disclosed two fastening elements that could perform the same function as the three fastening elements in the claims. The court construed the claims to require three separate elements and held that the reference did not disclose a separate third fastening element, either expressly or inherently.)

(Emphasis added.) Inherency means that *the missing descriptive matter is necessarily present* in the reference. The courts have allowed the PTO to rely on inherency arguments to free the PTO from the necessity of finding references which explicitly state that inherent elements are present. This is because certain characteristics are inherent, the references will most probably not mention these elements, and, as such, will be difficult to find. For example, it is not necessary to find a reference that explicitly states that plutonium 239 is radioactive, as plutonium 239 is always radioactive. That is, radioactivity is an inherent feature of plutonium 239. However, inherency is not a panacea that enables the PTO to use references which are *deficient* in teaching certain elements of a claim. Recognizing the power of the inherency argument, the courts have tempered its use, as is seen in § 2112, where the PTO has stipulated that the examiner must follow certain procedures before invoking inherency: the “examiner must provide rationale or evidence tending to show inherency.” In the present case, no such rationale or evidence has been provided in the Office Action, other than the unfounded allegation that Applicants have admitted that drawing always results in a bright surface. The PTO has not satisfied its burden to provide rationale or evidence showing that “the missing descriptive matter is necessarily present.” The subject matter of the independent claims is not necessarily present in any of the cited references. It is entirely probable that the cited references will be practiced in a manner where a bright looking surface does not result. Just as was the case of the third fastener in the example provided in the MPEP quoted above, the subject matter of Applicants’ claims is not expressly or inherently disclosed in the cited references. Thus, a reference that explicitly teaches these limitations must be found, or else the claims must be allowed.

Strohmeier, Takazawa, Creps & Kotera - Claims 20-39: The independent claims in this set, claims 20, 25 and 32, all recite a bright looking surface. Takazawa, Creps and

Kotera do not disclose or suggest a bright looking surface for at least the reasons noted above. The mere fact that Strohmeier uses a wet drawing method does not “necessarily suggest” that the wire has a bright looking surface for at least the same reasons that Takazawa and the other references do not “necessarily suggest” a bright looking surface. In this regard, in the interests of economy, the reader is directed to the portions of the section immediately above regarding “inherency” and the alleged “admissions” made by the Applicants.

Therefore, claims 20, 25 and 32 and their dependent claims are allowable.

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In sum, even if the first requirement of MPEP § 2143 is satisfied, the third requirement of MPEP § 2143 is not satisfied in the Office Action, since the cited references do not teach each and every element of the present invention. Thus, the present claims are allowable.

Lack of Suggestion or Motivation to Modify or Combine the References

Minamid & Creps : As noted above, Minamid specifically teaches that his wire is “widely used as a reinforcing material for a tire, belt and chord.” (Minamid, col. 10, lines 18-20.) Thus, Minamid teaches that his wire is to be used in very high temperature environments (*e.g.*, vulcanizing of rubber during manufacturing of a tire, etc.). Applicants submit that the skilled artisan would be discouraged from depositing a polyester coating on the wire of Minamid, as the polyester would likely melt when subjected to such extreme temperatures. Thus, the combination of the two references would be inventive; not the work of a mere artisan.

Further, the rationale proffered for combining the two references, “in order to increase the protection against corrosion of the resultant wire” of Minamid, is already satisfied by Minamid, because the “tire, belt and chord” in which Minamid’s wire is used would encase the wire, and thus prevent corrosion. It therefore would not have been obvious to combine Minamid and Creps.

Takazawa & Hiromori: As noted above, Hiromori teaches that he coats his wire with polyester *paint*. This would therefore discourage the skilled artisan attempting to obtain a wire coated with *transparent* polyester from utilizing Hiromori, since paint is not considered transparent by the artisan of ordinary skill. Thus, it would not have been obvious to rely on Hiromori to arrive at the claimed invention.

Strohmeier, Takazawa, Creps & Kotera: As noted in the response of January 07, 2004, the combination of Takazawa and Creps violates MPEP § 2143.01, subsection 6, because the combination of the two would change the principle of operation of the references. In the interests of economy, the reader is referred to the pertinent sections of the January 07, 2004 Office Action.

As to motivation to combination of Strohmeier with any of the other cited references, Applicants submit that the proffered motivation, “to modify the coated steel wire of Strohmeier . . . to provide antirust and anticorrosion properties to the wire” is already met by Strohmeier vis-à-vis the copper-sulfate coating. That is, the skilled artisan seeking to obtain a wire with antirust and anticorrosion properties would find Strohmeier and look no further, since Strohmeier satisfies the proffered motivation. Only an innovator would pursue further references.

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In summary, because of the lack of suggestion or motivation in the prior art to modify the reference(s), the first requirement of MPEP § 2143 has not been met and, hence, a *prima facie* case of obviousness has not been established.

Conclusion

If applicants have not accounted for any fees required by this Amendment, the Commissioner is hereby authorized to charge to our Deposit Account No. 19-0741. If applicants have not accounted for a required extension of time under 37 C.F.R. § 1.136, that extension is requested and the corresponding fee should be charged to our Deposit Account.

Applicants believe that the present application is now in condition for allowance.
Favorable reconsideration of the application as amended is respectfully requested.


Examiner Gray is invited to contact the undersigned by telephone if it is felt that a
telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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FOLEY & LARDNER LLP
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 295-4747
Facsimile: (202) 672-5399

By



Martin J. Cosenza
Attorney for Applicant
Registration No. 48,892